

(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2003/0074162 A1**
Fourie et al. (43) **Pub. Date: Apr. 17, 2003**(54) **CATHODIC PROTECTION REMOTE
MONITORING METHOD AND APPARATUS**(52) **U.S. Cl. 702/188**(75) Inventors: **Julius W. Fourie**, Houston, TX (US);
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Houston, TX 77084(21) Appl. No.: **10/269,632**(22) Filed: **Oct. 11, 2002****Related U.S. Application Data**(60) Provisional application No. 60/329,022, filed on Oct.
12, 2001. Provisional application No. 60/348,845,
filed on Jan. 15, 2002.**Publication Classification**(51) **Int. Cl.⁷ G06F 11/00**

A method for determining the influence of one of a plurality of cathodic protection circuits along a pipeline includes switching one of a plurality of cathodic protection circuits off, while the remainder of the plurality of cathodic protection circuits are left on, with a portable pipe-to-soil potential measurement unit measuring the pipe-to-soil potential along the pipeline. From these measurements, a calibration curve is generated and an apparatus for monitoring the cathodic protection circuits is strategically positioned on the pipeline. The apparatus includes a remote monitoring unit having a pipe-to-soil potential measurement unit for measuring the potential between the ground bed and pipeline. The remote monitoring unit is off except while making measurements. The remote monitoring unit may optionally include a pipeline current measurement unit connected at a second connection point on the pipeline for measuring the current passing through the pipeline between the first and second connection points.

